

Supplemental Amendments to Claims

Claim 1 (currently amended): A heat distributor mounted to an electrical connector having an insulation housing defining cells ~~that receive and retain therein~~ with conductive contacts each carrying soldering material to be soldered to a circuit board for uniformly transferring heat to/from the contacts during a soldering process, the heat distributor comprising:

a base plate made of thermally conductive material, the base plate having a bottom face being directly positioned on the housing and an opposite top face; and

a plurality of thermally conductive pins extending from the bottom face of the base plate;

wherein the pins are arranged in accordance with the cells and are inserted into the cells to physically engage the contacts for transferring heat to the contacts and the soldering material.

Claim 2 (original): The heat distributor as claimed in Claim 1, wherein the base plate and the pins are made of metals.

Claim 3 (cancelled) Included again.

Claim 4 (cancelled) Included again.

Claim 5 (original): The heat distributor as claimed in Claim 1, wherein the base plate has a surface area substantially corresponding to a top face of the connector housing.

Claim 6 (original): The heat distributor as claimed in Claim 1, wherein the base plate has a surface area substantially smaller than a top face of the connector housing.

Claims 7-8 (cancelled)

Claim 9 (cancelled)

Claim 10 (currently amended): An electrical connector system comprising:

a circuit board with conductive traces formed thereon;

an electrical connector comprising an insulation housing with ~~and~~ a plurality of conductive members therein ~~received in the housing~~, the housing defining a top surface and a bottom surface and an array of cells between the top surface and the bottom surface, each cell ~~receiving and retaining~~ with a conductive member therein, the conductive members each having tail sections corresponding to the conductive traces of the circuit board;

soldering pre-forms arranged between the conductive traces and the tail sections of the conductive members; and

a heat distributor attached to the connector and comprising a base plate and conductive pins extending from the base plate toward the housing, the pins thermally engaging the conductive members of the connector and creating a homogenous heat transfer to/from the soldering pre-forms to thereby eliminate heat differences between the soldering pre-forms, the base plate defining a surface area no greater than the top surface of the connector housing, the heat distributor being centrally located on the top surface of the connector housing.

Claim 11 (new) The heat distributor as recited in claim 1, wherein the base plate defines a plurality of apertures for controlling heat absorbed thereby.

Claim 12 (new) The heat distributor as recited in claim 1, further comprising a plurality of fins extending from the top face of the base plate.

18Pat
9/17/03